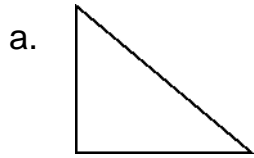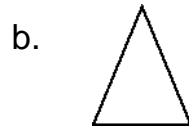# Geometry: Triangles 165

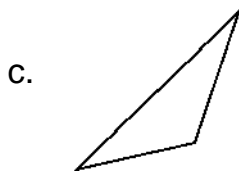1. Identify the different types of triangles as: equilateral, isosceles, scalene, right angles

a.

b.

_____

_____

c.

d.
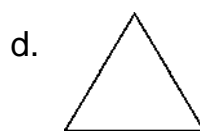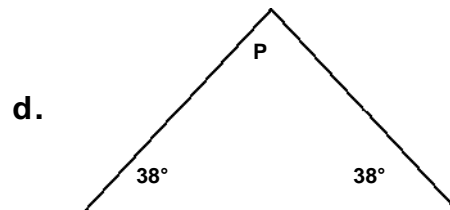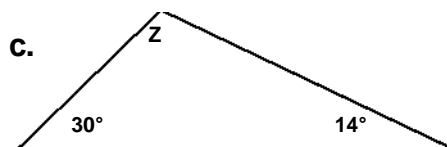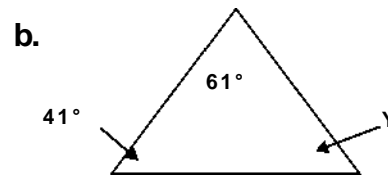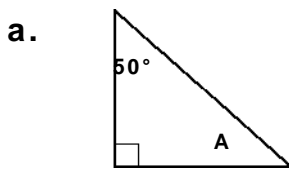
_____

_____

2. When machining parts if you know two angles you can determine the correct angle for the third. Solve for the given variable.

a.

50°

A

b.

61°

41°

Y

c.

Z
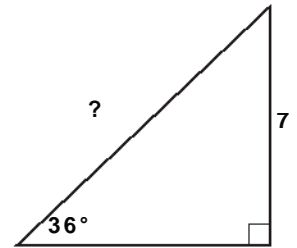
30°   14°

d.

P

38°   38°

3. When machining parts, if an individual knows an angle and one side, the length of the remaining sides can be determined using basic calculations. Likewise, if an individual knows two sides of a triangle, they can determine the correct angle that needs to be formed using basic calculations. Find the unknown quantity of the following right triangles
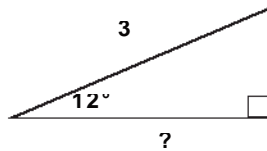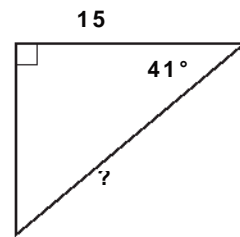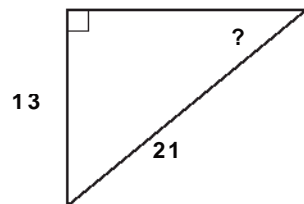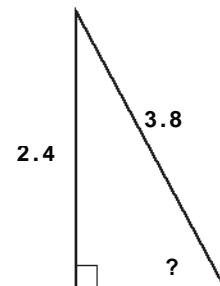
a.
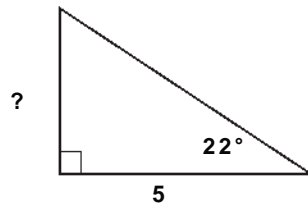
b.

c.

d.

e.

f.

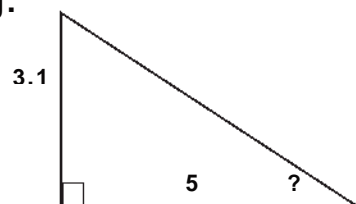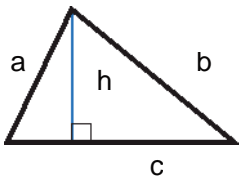**g.**

4. Calculate the area and perimeter of the following
   triangles. Also identify the type of triangle.

a.

a = 5.78 cm
b = 8.33 cm
c = 9.0 cm
h = 5.3 cm

Area = _____

Perimeter = _____

Type of triangle = _____

b.
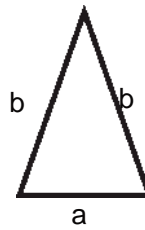
a = 4.1 in
b = 6.6 in

Area = _____

Perimeter = _____

Type of triangle = _____

c.
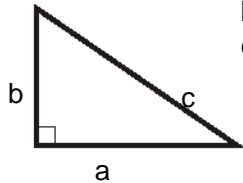
a = 8.5 cm
b = 5.9 cm
c = 10.35 cm

Area = _____

Perimeter = _____

Type of triangle = _____

d.
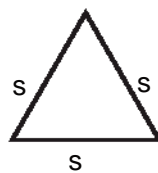
s = 5.3 inches

Area = _____

Perimeter = _____

Type of triangle = _____

5. You must bend a bar of metal for a customer. The engineering department gives a set of prints, but the information on them is not complete.
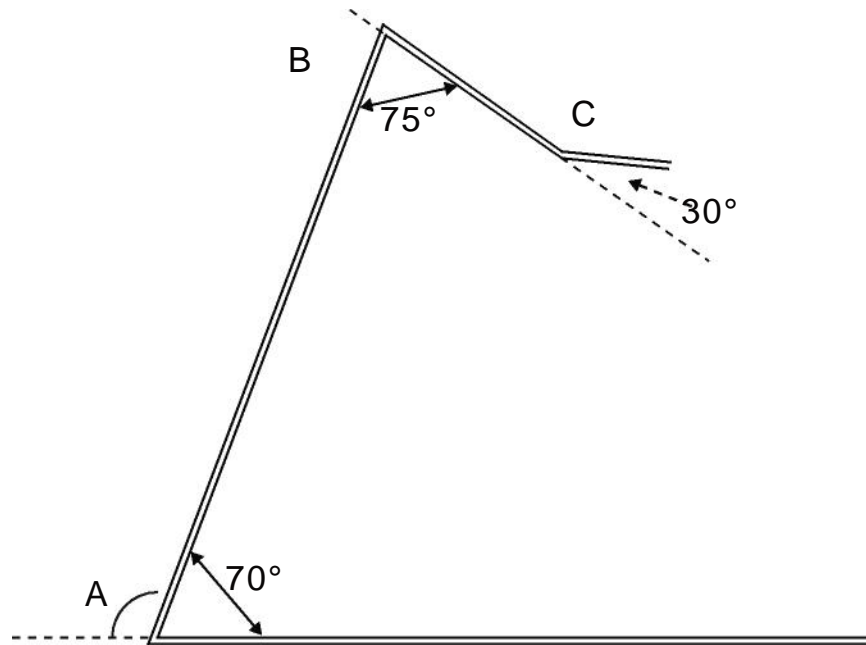
a. What is the angle of A?

b. What is the angle of B?

c. What is the angle of C?

Image Resource: Images developed by S. Grudzinski.